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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,801	07/30/2003	Naoto Abe	00862.002955.1	7926

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

WU, XIAO MIN

ART UNIT PAPER NUMBER

2629

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,801

Applicant(s)

ABE ET AL.

Examiner

XIAO M. WU

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32,35,39-41 and 47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32,35,39-41 and 47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 32, 35 and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Morozumi (US Patent No. 4,716,403).

As to claims 32, Morozumi discloses an image display apparatus comprising: a plurality of display devices (Fig. 28) wired in a matrix through a plurality of scanning signal wirings (Y1-Ym, Fig. 28) and a plurality of modulated signal wirings (X1 to Xn, Fig. 28); and a driving circuit (321, Fig. 28) configured to apply modulated signal having a pulsewidth to each of said plurality of modulated signal wirings, wherein the driving circuit (Fig. 28) has a plurality of transistors 323, Fig. 28) connected in parallel to one of the plurality of modulated signal wirings, wherein the plurality of transistors include a first transistor and a second transistor, and a time period in which the first transistor is in an on state and a time period in which the second transistor is in an on state are different from each other (see Fig. 31, S1, S2,.. are turned on in different time).

As to claim 35, Morozumi discloses wherein at least one of the pluralities of transistors is connected to a predetermined potential (see Figs. 28 and 31).

As to claim 39, Morozumi discloses a circuit (321, Fig. 28) for determining the operation states of the plurality of transistors..

As to claim 40, Morozumi discloses the driving circuit comprises a rise circuit for raising a signal level and a fall circuit for causing the signal level to fall (see X, X2, X3, X4, Fig. 31).

As to claim 41, Morozumi discloses each said display device comprises an electron-emitting device (e.g. the backlight is emitting the light through the LCD).

3. Claim 47 is rejected under 35 U.S.C. 102(b) as being anticipated by Amano (US Patent No. 4,021,607).

As to claim 47, Amano discloses an image display apparatus comprising: a plurality of display devices (1, Fig. 5) wired in a matrix through a plurality of scanning signal wirings (X1-X5, Fig. 5) and a plurality of modulated signal wirings (A1 to D4, Fig. 5); and a driving circuit (Fig. 5) configured to apply modulated signal having a pulsewidth (see Fig. 9) to each of said plurality of modulated signal wirings, wherein at least one pulse signal has a first portion at the leading edge of the pulse signal and a second portion at the trailing edge of the pulse signal, wherein in the first portion, a signal level of the pulse rises up to a first predetermined level which is lower than a maximum level of the pulse signal and is maintained at the first predetermined level, and wherein in the second portion, signal level of the pulse falls down to a second predetermined level which is lower than the maximum level of the pulse signal and is maintained at the second predetermined level (e.g. as shown in Fig. 9, the gray scale level 3 has a leading edge rising up to a level which is lower than the maximum level as shown in level 9, and the falling edge of the gray scale level 3 has a level lower than the maximum level..

Response to Arguments

1. Applicant's arguments filed 3/29/2006 have been fully considered but they are not persuasive.

With respect to newly amended claim 32, please see the newly applied prior art to Morozumi. With respect to claim 47, please see the new discussion of Amano above.

*Conclusion*

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.

September 24, 2006

  
**XIAO M. WU**  
**Supervisory Patent Examiner**  
**Art Unit 2629**